

Abstract Submitted  
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**Dust Measuring Diagnostics on Alcator C-Mod**<sup>1</sup> AARON BADER, ROBERT GRANETZ, BRIAN LABOMBARD, JERRY HUGHES, IAN HUTCHINSON, JIM IRBY, KIRILL ZHUROVICH, Massachusetts Institute of Technology — We present initial results from a laser scattering diagnostic viewing scattered light from large particles present in the C-Mod vessel. The light source consists of pulsed Nd:YAG lasers principally used for Thomson scattering. In order to view the YAG laser line (1064 nm) collection fibers and detectors were installed alongside the existing Thomson scattering diagnostic. Results from this diagnostic are presented with comparisons to data collected from similar diagnostics on other machines. Additionally, we present designs for a new Dust Scattering Diagnostic to view the dynamics of injected dust in the scrape off layer. Boron dust particles will be injected into the vessel via a gas puff during a shot. The particles will be illuminated by 532 nm laser light and the images will be captured with a fast-framing CCD camera. This diagnostic is scheduled to be operational in the next campaign.

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